

The Determination Of Water Resource Classes, Reserve And Resource Quality Objectives For Secondary Catchments (A5-A9) Within The Limpopo WMA And Secondary Catchment B9 in the Olifants WMA.

Project Steering Committee Meeting No. 2

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Directorate: Reserve Determination

Date: 14 March 2024

WATER IS LIFE - SANITATION IS DIGNITY



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



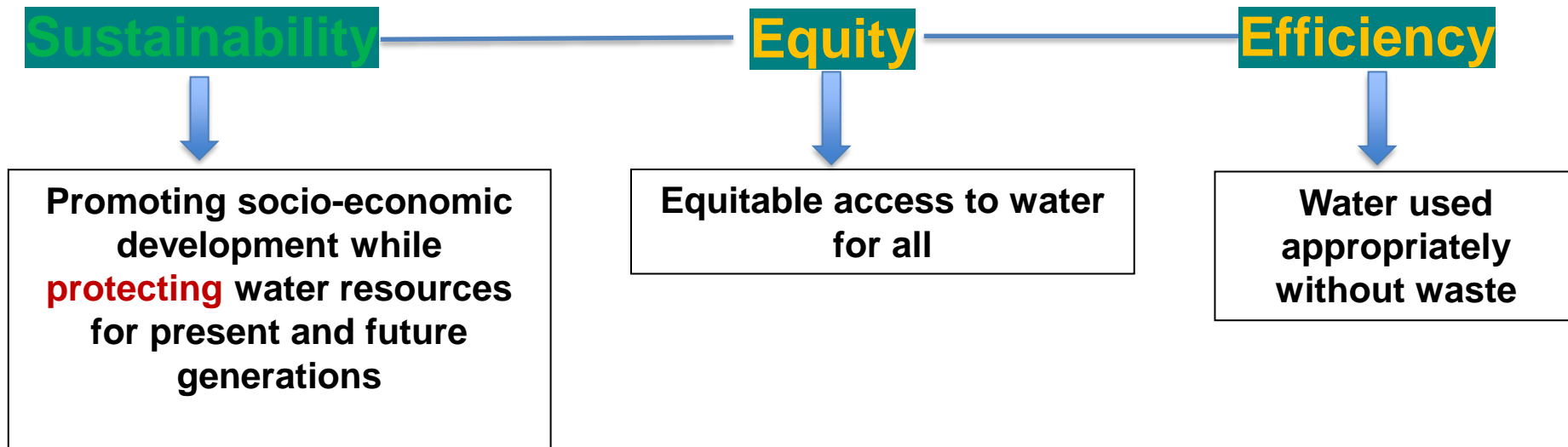
OUTLINE

1. Introduction
2. Background on water resources protection
3. Resource Directed Measures (RDM) process
4. Study Objectives
5. Study approach
6. Study progress & stakeholder engagement

1. INTRODUCTION

The National Water Act 36 of 1998 (NWA)

Purpose: ensure nation's water resources are **Protected**, Used, Controlled, Managed, Conserved, and Developed, within guiding Principles:



2. BACKGROUND ON WATER RESOURCE PROTECTION

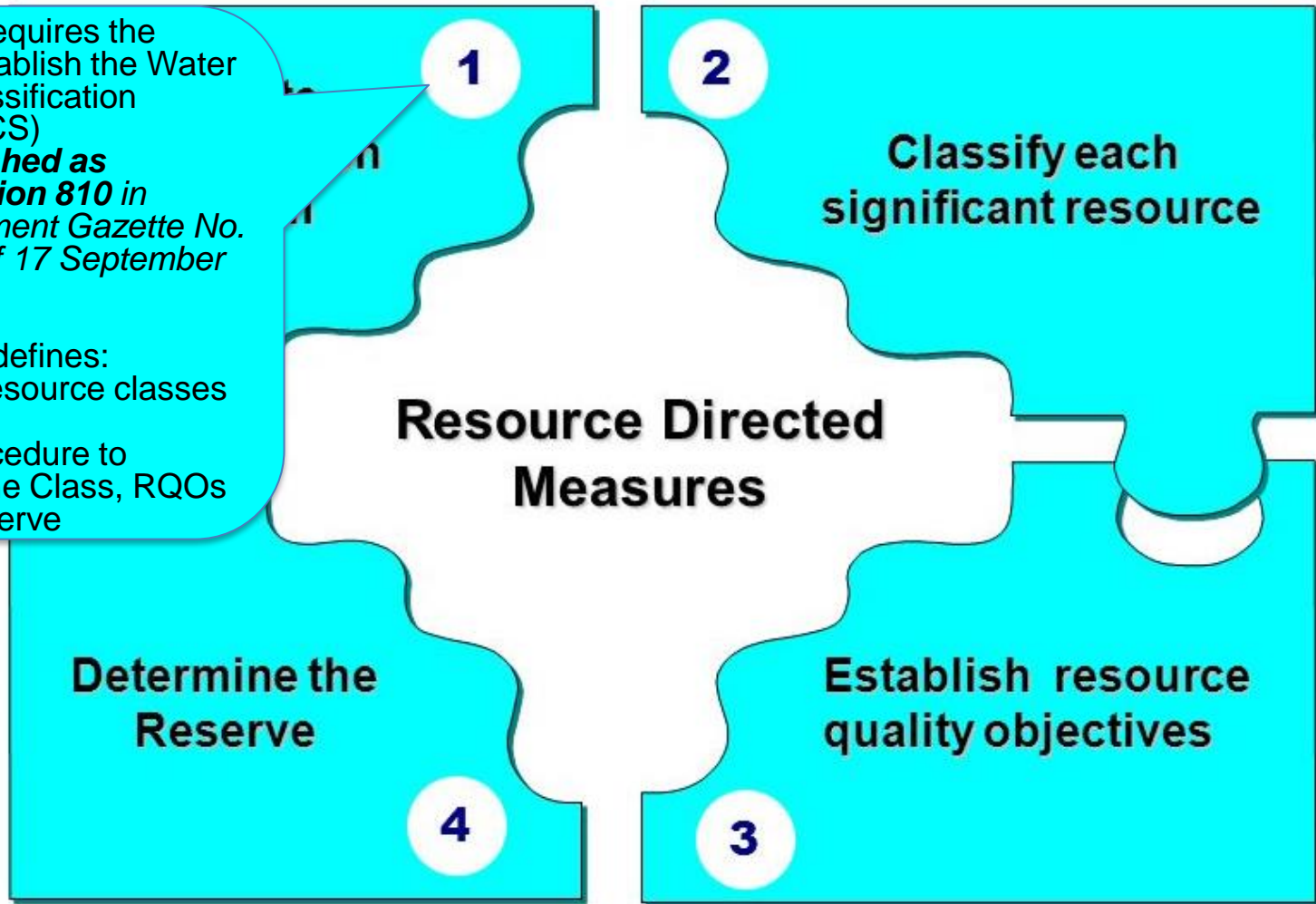
- Water is fundamental to socio-economic development and environmental sustainability



- Chapter 3 of the NWA provides tools for the protection of water resources through the implementation of:
 - ☐ Resource Directed Measures (RDM)
 - Classification of Water Resources (S13)
 - Determination of Resource Quality Objectives (RQOs) (S13)
 - Determination of the Reserve (S16 & S17)

3. RESOURCE DIRECTED MEASURES PROCESS

- **S12, NWA** requires the Minister to establish the Water Resource Classification System, (WRCS)
 - **Published as Regulation 810** in Government Gazette No. 33541 of 17 September 2010
- The WRCS defines:
 - water resource classes and
 - the procedure to determine Class, RQOs and Reserve



3.1. WATER RESOURCE CLASSIFICATION

Classification defines the **desired state** of the water resources by setting Water Resource Classes;

Each class represents:

- a different **level of protection** that is required for the water resource, and
- **the extent to which the water resource can be used.**

Classification describes:

- The **present status** of the water resource,
- The state towards which the water resource needs **to be managed** sustainably (**future state**).

Surface water,
groundwater, wetlands,
estuaries

2

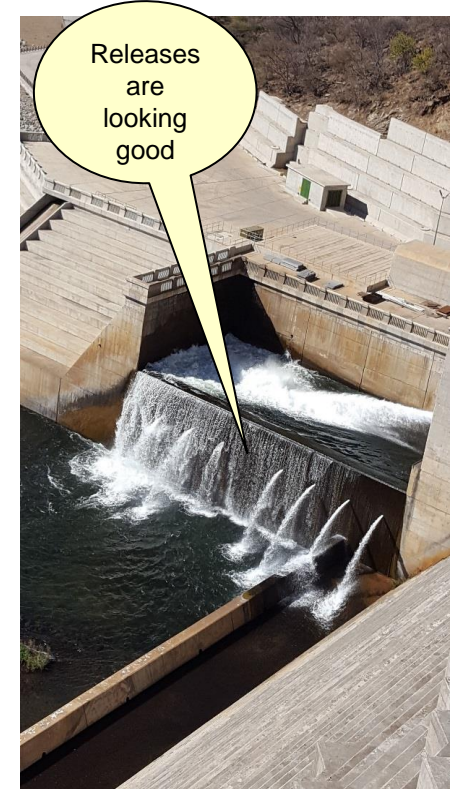
**Classify each
significant resource**

s13, NWA

Classes	Description of use	Majority of ecological categories
Class I	Minimally used	A-B
Class II	Moderately used	C
Class III	Heavily used	D

3.2. RESOURCE QUALITY OBJECTIVES

- **Purpose:** to establish clear goals relating to the quantity, quality, habitat, biota of the relevant water resources.
 - ✓ Provide measurable management goals that give direction to resource managers as to how the resource needs to be managed.
- RQOs could be narrative and/or numerical

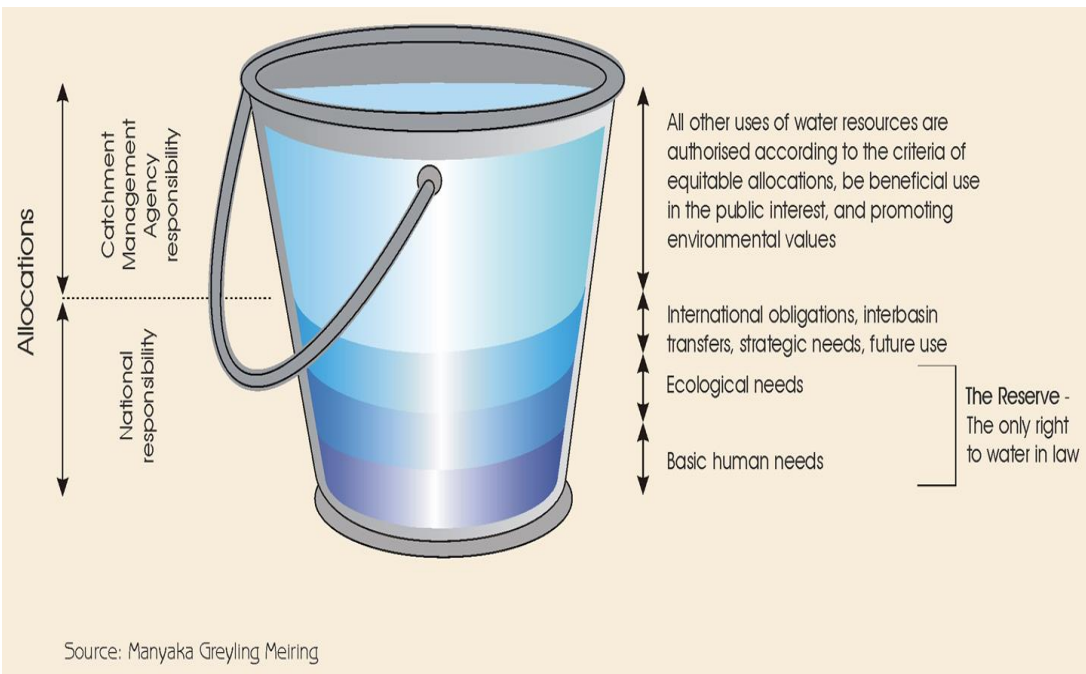


Establish resource
quality objectives

3

s13, NWA

3.3. THE RESERVE



- **Reserve** means the quantity and quality of water required:
- (a) to satisfy **basic human needs** by securing a basic water supply, for people who are now or who will, in the reasonably near future, be
 - (i) relying upon;
 - (ii) taking water from; or
 - (iii) being supplied from, the relevant water resource; and
- (b) to **protect aquatic ecosystems** in order to secure ecologically sustainable development and use of the relevant water resource.

Determine the Reserve

4

s16 & 17, NWA



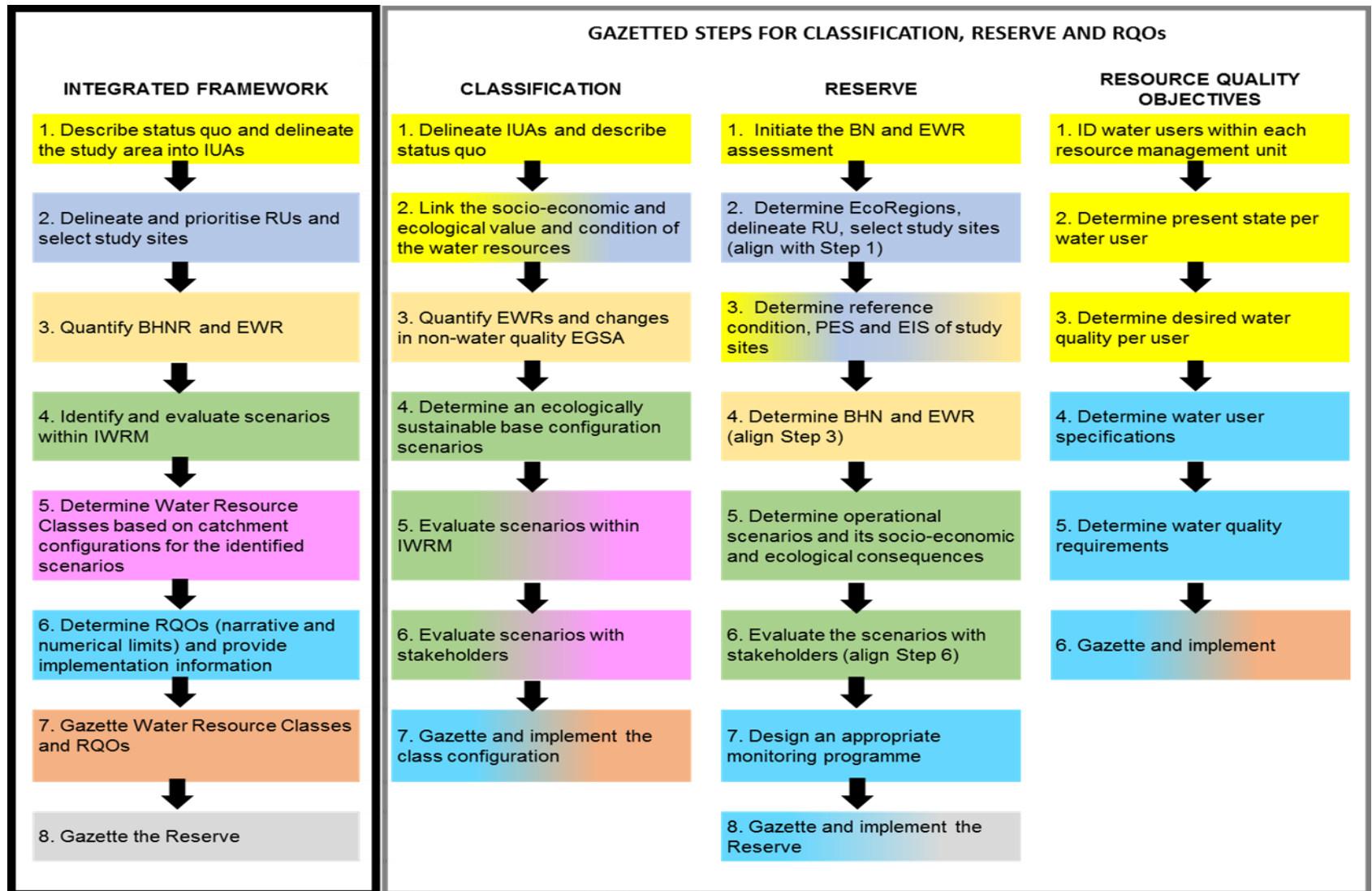
4. STUDY OBJECTIVES

- The C.D: Water Ecosystem initiated a four-year project study
- “Determination of Water Resource Classes, Reserve and Resource Quality Objectives for Secondary Catchments **A5 – A9** within the Limpopo Water Management Area (WMA 1) and Secondary Catchment **B9** in the Olifants Water Management Area (WMA 2)”
 - 22 September 2021-21 September 2025
 - Myra Consulting was appointed as the PSP
- The main objectives of the project is to determine:
 - Water Resource Classes;
 - Reserve
 - Resource Quality Objectives
- Gazetting of Water Resource Classes, Reserve and RQOs
 - Once approved by the Minister



5. STUDY APPROACH: INTEGRATED PROCEDURE

Integrated framework for incorporating the gazetted steps for Classification, Reserve and RQOs is used to guide the study



6. STUDY PROGRESS



BHNR assessment report completed

- river, wetland and groundwater resource units (RUs) identified
- 12 IUAs defined
- 74 biophysical nodes

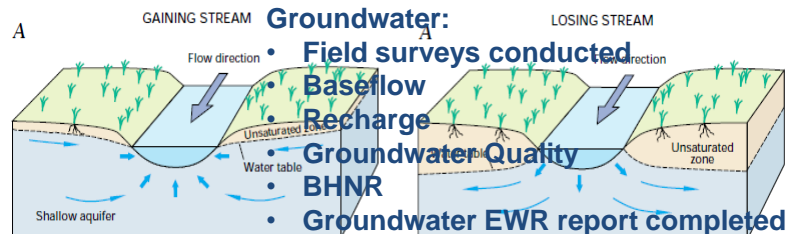
Rivers, groundwater, wetlands

Rivers:

- EWR site selection survey
- EWR site selection report completed
- EWR assessment surveys
- Low flows, High flows, Autumn
- Ecocategorisation report completed
- EWR quantification
- EWR workshop conducted
- Pre-scenario workshop
- EWR assessment reports review

Wetlands:

- Wetland prioritization
- Surveys conducted
- Ecocategorisation report completed
- EWR quantification
- Priority wetlands (RAMSAR)
 - Hydrodynamic model
 - DRIFT model
- Other wetlands
- RQOs
- EWR assessment report review



1. Delineate and prioritise RUs and select study sites

Public meeting, PSC 1

2. Describe status quo and delineate the study area into IUAs

3. Quantify BHN and EWR

TTG, PSC 2

4. Identify and evaluate scenarios within IWRM

Next steps

PSC 3: Nov 2024

5. Determine Water Resource Classes based on catchment configurations for the identified scenarios

6. Determine RQOs (narrative and numerical limits) and provide implementation information

7. Gazette Water Resource Classes and RQOs

8. Gazette the Reserve

Stakeholder engagement

For more information:

<https://www.dws.gov.za/RDM/WRCS/lvhv.aspx>



THANK YOU